

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) ~~In a computer system, a~~ A method for generating providing an adapter/stub for a virtual machine during runtime, wherein the adapter/stub can behave as an adapter or a stub for the virtual machine, said method comprising:
 - identifying a machine state input parameter for a machine state;
 - identifying input parameters for a call to compiled code;
 - mapping the machine state input parameter and the machine state to the input parameters for the call to compiled code;
 - mapping the machine state and return value to an exit point of an interpreter to compiled code adapter;
 - generating an adapter/stub that can behave as an adapter or a stub for the virtual machine;
 - determining whether to provide the adapter/stub as an adapter or as a stub for the virtual machine;
 - providing a stub representation to a compiler for compilation[[;]] and generating object code based on the compilation when the determining determines to provide the adapter/stub as a stub;
 - determining whether to provide an interpreter to compiled code (I/C) adapter or a compiled code to interpreter (C/I) adapter when the determining determines to provide the adapter/stub as an adapter;
 - providing an interpreter to compiled code (I/C) adapter that facilitates translation of a first execution stack used by an interpreter associated with the virtual machine when the determining determines to provide the interpreter to compiled code (I/C) adapter, so that the first execution stack can subsequently be used to execute compiled code compiled by a compiler associated with the virtual machine; and

providing a compiled code to interpreter (C/I) adapter that facilitates translation of a second execution stack used for execution of complied code compiled by a compiler associated with the virtual machine when the determining determines to provide the compiled code to interpreter (C/I) adapter, so that the second execution stack can subsequently be used by an interpreter associated with the virtual machine.

2-8. (Canceled)

9. (Previously Presented) The method of claim 1, wherein the method is performed in response to a determination that the adapter/stub is not stored in an adapter/stub library associated with the computer system.

10. (Previously Presented) The method of claim 9, wherein the determination is performed when compiled code is to be executed by the computer system, and the computer system determines that an interpreter to compiled code (I/C) adapter/stub is required.

11. (Canceled)

12. (Currently Amended) The method of claim 44 1, wherein the adapter/stub is further operable to update the states of different components of the computer system.

13-16. (Canceled)

17. (New) A method as recited in claim 1, wherein said determining of whether to provide an interpreter to complied code (I/C) adapter or a compiled code to interpreter (C/I) adapter comprises: determining whether one or more bytecodes have been processed by a interpreter.

18. (New) A computer readable medium including computer program code for providing an adapter/stub for a virtual machine during runtime, wherein the adapter/stub can behave as an adapter or a stub for the virtual machine, comprising:

computer program code for generating an adapter/stub that can behave as an adapter or a stub for the virtual machine;

computer program code for determining whether to provide the adapter/stub as an adapter or as a stub for the virtual machine;

computer program code for providing a stub representation to a compiler for compilation and generating object code based on the compilation when the determining determines to provide the adapter/stub as a stub;

computer program code for determining whether to provide an interpreter to compiled code (I/C) adapter or a compiled code to interpreter (C/I) adapter when the determining determines to provide the adapter/stub as an adapter;

computer program code for providing an interpreter to compiled code (I/C) adapter that facilitates translation of a first execution stack used by an interpreter associated with the virtual machine when the determining determines to provide the interpreter to compiled code (I/C) adapter, so that the first execution stack can subsequently be used to execute compiled-code compiled by a compiler associated with the virtual machine; and

computer program code for providing a compiled code to interpreter (C/I) adapter that facilitates translation of a second execution stack used for execution of compiled code compiled by a compiler associated with the virtual machine when the determining determines to provide the compiled code to interpreter (C/I) adapter, so that the second execution stack can subsequently be used by an interpreter associated with the virtual machine.

19. (New) A computer readable medium including computer program code for providing an adapter/stub for a virtual machine during runtime, wherein the adapter/stub can behave as an adapter or a stub for the virtual machine, comprising:

computer program code for identifying a machine state input parameter for a machine state;

computer program code for identifying input parameters for a call to compiled code;

computer program code for mapping the machine state input parameter and the machine state to the input parameters for the call to compiled code; and

computer program code for mapping the machine state and return value to an exit point of an interpreter to compiled code adapter.

20. (New) A computer readable medium as recited in claim 18, wherein said determining of whether to provide an interpreter to compiled code (I/C) adapter or a compiled code to interpreter (C/I) adapter comprises: determining whether one or more bytecodes have been processed by a interpreter.

21. (New) A computing system, comprising:

at least one processor that operates to:

determine whether to provide the adapter/stub as an adapter or as a stub for the virtual machine;

provide a stub representation to a compiler for compilation and generating object code based on the compilation when the determining determines to provide the adapter/stub as a stub;

determine whether to provide an interpreter to compiled code (I/C) adapter or a compiled code to interpreter (C/I) adapter when the determining determines to provide the adapter/stub as an adapter;

provide an interpreter to compiled code (I/C) adapter that facilitates translation of a first execution stack used by an interpreter associated with the virtual machine when the determining determines to provide the interpreter to compiled code (I/C) adapter, so that the first execution stack can subsequently be used to execute compiled-code compiled by a compiler associated with the virtual machine; and

provide a compiled code to interpreter (C/I) adapter that facilitates translation of a second execution stack used for execution of compiled code compiled by a compiler associated with the virtual machine when the determining determines to provide the compiled code to interpreter (C/I) adapter, so that the second execution stack can subsequently be used by an interpreter associated with the virtual machine.

22. (New) A computing system as recited in claim 21, wherein the at least one processor operates to:

identify a machine state input parameter for a machine state;

identify input parameters for a call to compiled code;

map the machine state input parameter and the machine state to the input parameters for the call to compiled code; and

map the machine state and return value to an exit point of an interpreter to compiled code adapter.

23. (New) A computing system as recited in claim 21,

wherein said determining of whether to provide an interpreter to complied code (I/C) adapter or a compiled code to interpreter (C/I) adapter comprises: determining whether one or more bytecodes have been processed by a interpreter.